UTAH OIL AND GAS CONSERVATION COMMISSION WATER SANDS LOCATION INSPECTED REMARKS WELL LOG ELECTRIC LOGS

OCTOBER 26, 1998 UTU-57455 STATE LEASE NO. PUBLIC LEASE NO. INDIAN NOVEMBER 10, 1998 DRILLING APPROVED SPUDDED IN: PUT TO PRODUCING: COMPLETED: INITIAL PRODUCTION: **GRAVITY A.P.I.** GOR:

DATE FILED LAND: FEE & PATENTED

PRODUCING ZONES:

TOTAL DEPTH: WELL ELEVATION:

HANGING

SEC.

DATE ABANDONED: FIELD: WILDCAT HANGING UNIT:

655 FNL

RGE.

COUNTY

WELL NO

LOCATION

TWP

ROCK UINTAH

FT. FROM (N) (S) LINE,

OPERATOR

#6-2 ROCK I

1559 FEL

FT. FROM (E) (W) LINE.

TWP.

125

API

RGE.

23E

NW NE

NO.

SEC.

6

Certialential

OPERATOR

43-047-33234

SUB. REPORT/abd.

1/4 - 1/4 SEC.

ROSEWOOD RESOURCES

6



October 1, 1998

Bureau of Land Management 170 South 500 East Vernal, UT 84078

Attention: Minerals

This letter is to inform you that Permitco Inc. is authorized to act as Agent and to sign documents on behalf of Rosewood Resources, Inc. when necessary for filing county, state and federal permits including Onshore Order No. 1, Right of Way applications, etc., for the Hanging Rock 1#6-2well, located Lot 2 (NW NE) Sec. 6, T12S - R23E

I should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production or compliance with regulations.

Rosewood Resources, Inc. agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above mentioned well. If you have any questions, please feel free to contact me at (435) 789-0414.

Sincerely,

Danny Widner
Drilling Manager

DW/In



14421 Weld County Rd.10 • Ft. Lupton, Colorado 80621 • (303) 857-9999 • FAX (303) 857-0577 • E-MAIL Permitco 1@aol.com

October

DIV. OF OIL, GAS & MINING

Utah Division of Oil, Gas & Mining 1594 West North Temple, Suite 1210 Bpx 145801 Salt Lake City, UT 84114-5801

Attn: John Baza

Re:

Rosewood Resources, Inc.

Hanging Rock I #6-2
655' FNL and 1559' FEL

Lot 2 (NW NE) Sec. 6, T12S - R23E
Uintah County, Utah

Dear John,

Enclosed please find three copies of the Application for Permit to Drill on the above mentioned well along with one copy of the drilling program and surface use plan which has been filed with the BLM in Vernal, Utah.

Please forward the approved copies Lucy Nemec of Resewood Resources, Inc., P.O. Box 1668, Vernal, UT 84078. Thanks for your assistance in this matter. If you have any questions, please don't hesitate to contact me.

Sincerely.

PERMITCO INC.

Lisa L. Smith Consultant for:

Rosewood Resources, Inc.

Enc.

cc: Rosewood Resources, Inc. - Vernal, UT
Rosewood Resources, Inc. - Dallas, TX

DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

SUBMIT IN TRIPLICATE* (Other instr

Form approved. Budget Bureau No. 1004-0136

V. OF OIL, GAS & MINING

Expires December 31, 1991

LEASE	DESIGNATION	AND	SERIAL NO.

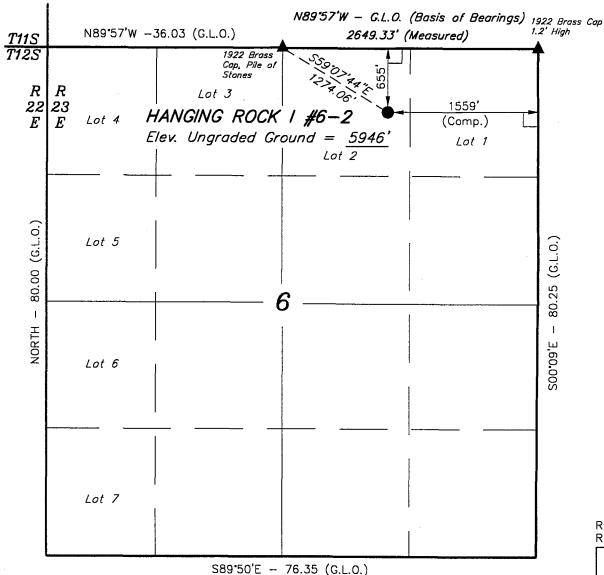
6. IF INDIAN, ALLOTTEE OR TRIBE NAME

UTU-57455

N/A

1a. TYPE OF WORK	DRILL X	j	DEEPEN	' <u>Ш</u>			7. UNIT AGREEMENT NAME		
b. TYPE OF WELL							Hanging Rock Un	nit	
OIL WELL	GAS WELL X	го [THER		SINGLE X	MULTIPLE	8. FARM OR LEASE NAME, WI	ELL NO.	
2. NAME OF OPERATOR	WELLL L		435/789-0414		Box 1668	ZONE	Hanging Rock I		
Rosewood Resor	arces. Inc.		435/789-0497		l, UT 84078		9. API WELL NO.		
3. ADDRESS AND TELEPHO			303/857-9999		Weld Count		#6-2		
PERMITCO IN	C.		303/857-9577		pton, CO 80		10. FIELD AND POOL, OR WILL	DCAT	
			dance with any State requires		prom, co o	, O. I.	Wildcat		
At Surface 100	u79.3		^^		PAITIRE		11. SEC., T., R., M., OR BLK.		
655' FNL and	1559' FEL			N-II	IFNIIAL	_	AND SURVEY OR AREA		
At proposed prod. zone Lot 2 (NW NE	\ Soc 6 T1)\$ D22E		6	38 5 29.2 407 503.4	4	Sec. 6, T12S - R2	3E	
14. DISTANCE IN MILES AND	DIRECTION FROM	VEAREST TOWN	OR POST OFFICE*	2/4	407 903.4		12. COUNTY OR PARISH	13. STATE	
Approximately:							Uintah	Utah	
5. DISTANCE FROM PR	OPOSED*	01 2001		16. N	O. OF ACRES IN LE	ASE	17. NO. OF ACRES ASSIGNED	Otan	
LOCATION TO NEAR PROPERTY OR LEAS							TO THIS WELL		
(Also to nearest drlg. u	nit line, if any)		655'		10,092.71	Acres	40 Acres	š	
 DISTANCE FROM PR TO NEAREST WELL 	DRILLING, COM	PLETED		19. P	ROPOSED DEPTH		20. ROTARY OR CABLE TOOLS		
OR APPLIED FOR, OF	N THIS LEASE, FT		None		7,100	,	Datam		
21. ELEVATIONS (Show wheth	er DF, RT, GR, etc.)		110110		7,100	<u></u>	Rotary 22. APPROX. DATE WORK WIL	I START*	
5,946' ungrade	d						November 1		
23.			PROPOSED CA	ASING AND	CEMENTING PR	OGRAM	2.0,022002.	, 1>>0	
SIZE OF HOLE	GRADE, SIZ	E OF CASING	WEIGHT PER F	FOOT	SETTING	DEPTH	QUANTITY OF CEN	/FNT	
12-1/4"	9.4	5/8''	36#		50		300 sx Class "G"		
7-7/8''		1/2"	11.6#		7,10			0.05001	
1-110	7-1	1/2	11.0π		/,10	<u>'</u>	1300 sx top of cemen	t @ 2500°	
and State of Utal See Onshore Ord	ı requiremei	nts.	CONFIDE				l and abandoned as pe HOLE		
Please be advised Rosewood Resou conducted upon	rces, Inc. ag	rees to be	ources, Inc. is con e responsible und	sidered er the te	to be the Operms and co	perator of t nditions of	the above mentioned w the lease for the opera	vell. itions	
Bond coverage fo	or this well is it as provide	s provide d for in 4	d by Nationwide 3 CFR 3104.2.	Bond N	o. MT-0627	. The prin	cipal is Rosewood Res	ources, Inc.	
N ABOVE SPACE DESCR	IBE PROPOSED PE	ROGRAM: If p	roposal is to deepen or plug b	back, give dat	a on present produc	tive zone and prop	osed new productive zone. If propos	al is to drill or	
deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any. Consultant For:									
SIGNED SIL	190	mth		TITLE		ood Resour	ces, Inc.	Date 10/23/98	
(This space for Federal or Sta	te office use)	11-	11						
PERMIT NO.	43-1	047-33			APPROVAL DATE_				
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. CONDITIONS OF APPROVAL, IF ANY: Federal Approval of this									
Action is Necessary									
Months: Market M									
APPROVED BY BRADLEY G. HILL ITTLERECLAMATION SPECIALIST IIPATE 11/10/9 %									
***		21,00		— HE	LAMAHO	N SPECIAL		<u> </u>	
		IIL	*See Instruc	tions O	n Davaras S	ido.		नित्र ता ह	
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			or any person knowing						
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T12S, R23E, S.L.B.&M.



LEGEND:

= 90' SYMBOL

LATITUDE = 39'48'29" LONGITUDE = 109'22'53"

= PROPOSED WELL HEAD.

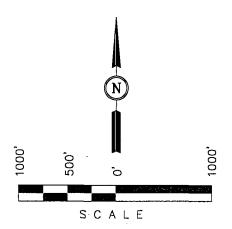
SECTION CORNERS LOCATED.

ROSEWOOD RESOURCES, INC.

Well location, HANGING ROCK | #6-2, located as shown in Lot 2 of Section 6, T12S, R23E, S.L.B.&M. Uintah County Utah.

BASIS OF ELEVATION

BENCH MARK 87 EAM LOCATED IN THE SW 1/4 OF SECTION 1, T12S, R23E, S.L.B.&M. TAKEN FROM THE ARCHY BENCH SE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5887 FEET.



THIS IS TO CERTIFY THAT THE ABOVE, PLAT. WAS PRES FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNI SUPERVISION AND THAT THE SAME ARE

BEST OF MY KNOWLEDGE AND

REVISED: 9-10-98 D.COX REVISED: 10-9-98 C.B.T.

(C.L.O.)

80.25

UINTAH ENGINEERING & LAND SURVEYING 85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: DATE DRAWN: 8-17-98 8-19-98		
PARTY G.S. D.B. C.B.T.	REFERENCES G.L.O. PLAT		
WEATHER HOT	FILE ROSEWOOD RESOURCES INC		

CONFIDENTIAL - TIGHT HOLE

ONSHORE OIL & GAS ORDER NO. 1

Approval of Operations on Onshore Federal and Indian Oil & Gas Leases

HANGING ROCK I #6-2 655' FNL and 1559' FEL Lot 2 (NW NE) Sec. 6, T12S - R23E Uintah County, Utah

Prepared For:

ROSEWOOD RESOURCES, INC.

By:

Tity PERMITCO INC. 14421 Weld County Road 10 Ft. Lupton, Colorado 80621 303/857-9999

Copies Sent To:

- 3 Bureau of Land Management Vernal, UT
- J Utah Division of Oil, Gas & Mining Salt Lake City, UT
- 3 Rosewood Resources, Inc. Vernal, UT
- 3 Rosewood Resources, Inc. Dallas, TX



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DRILLING PROGRAM

Page 1

ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal and Indian Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Formation Top

Formation	Depth	Subsea
Uintah A	Surface	+5,946'
Green River	271'	+5,675'
Wasatch	2,971'	+2,975
Mesa Verde	4,646'	+1,300'
T.D.	7,100'	-1,154'

2. Anticipated Depths of Anticipated Water, Oil, Gas or Mineral Formations:

Substance	Formation	Depth
Oil/Gas	Wasatch	2,971'-4,646'
Oil/Gas	Mesa Verde	4.646'-7.100'

All fresh water prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

3. Blow Out Preventor Requirements/Equipment

Rosewood's minimum specifications for pressure control equipment are as follows:

Ram Type: 10" Hydraulic double with annular, 3000 psi w.p.



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DRILLING PROGRAM

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Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers (if used) shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed;
- b. whenever any seal subject to test pressure is broken
- c. following related repairs; and
- d. at 30-day intervals

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) the check valve shall be held open or the ball removed.

Annular preventers shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.

A BOPE pit level drill shall be conducted weekly for each drilling crew.

Pressure tests shall apply to all related well control equipment.

All of the above described tests and/or drills shall be recorded in the drilling log.



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DRILLING PROGRAM

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BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

The District Office should be notified, with sufficient lead time, in order to have the BLM representative on location during pressure testing.

- a. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not been chosen to drill this well, most of the equipment for this depth of hole in the area use a 10", 3000 psi working pressure blowout preventor.
- b. A choke line and a kill line are to be properly installed. The kill line is <u>not</u> to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit <u>all</u> tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

4. Proposed Casing and Cementing Program:

a. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all



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DRILLING PROGRAM

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relevant factors, including; presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.

- b. Casing design shall assume formation pressure gradients of 0.44 to 0.50 psi per foot for exploratory wells (lacking better data).
- c. Casing design shall assume fracture gradients from 0.70 to 1.00 psi per foot for exploratory wells (lacking better data)
- d. Casing collars shall have a minimum clearance of 0.422 inches of all sides in the hole/casing annulus, with recognition that variances can be granted for justified exceptions.
- e. All waiting on cement times shall be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.
- f. All casing except the conductor casing, shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.
- g. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.
- h. All indications of usable water shall be reported to the authorized officer prior to running the next string of casing or before plugging orders are requested, whichever occurs first.
- i. Three centralizers will be run on the bottom three joints of surface casing with a minimum of one centralizer per joint starting with the shoe joint.
- j. Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.



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- k. All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.
- 1. On all exploratory wells, and on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- m. The proposed casing program will be as follows:

<u>Purpose</u>	Depth	Hole Size	$\underline{\mathbf{O}}.\underline{\mathbf{D}}.$	<u>Weight</u>	Grade	Type	New or Used
Surface	0-500'	12-1/4''	9-5/8''	36#	J/K-55	ST&C	New
Produc.	0-7100'	7-7/8''	4-1/2''	11.6#	N-80	LT&C	New

- n. Casing design subject to revision based on geologic conditions encountered.
- o. The cement program will be as follows:

<u>Surface</u>		
0_500'		

300 sx Class "G" with 2% CaCl & .25#/sk Cello-Flake, or sufficient to circulate to surface.

Production 0-7100'

Type and Amount

Type and Amount

1st Stage: 900 sx Class "G" + .3% CFR-3 + .25#/sk Cello-Flake + .5% Halad 9 + 2% Gel + 2% Microbond. The estimated top of the Cement is 2500'.

2nd Stage: 400 sx +/- Halco-Lite + 1% Econolite + .25#/sk Cello-Flake + 2% Microbond + 3% Salt The estimated top of cement is at the surface.



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DRILLING PROGRAM

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- p. Anticipated cement tops will be reported as to depth; not the expected number of sacks of cement to be used. The District Office should be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.
- q. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC time shall be recorded in the driller's log.
- r. The following reports shall be filed with the District Manager within 30 days after the work is completed.
 - 1. Progress reports, Form 3160-5 (formerly 9-331) "Sundry Notices and Reports on Wells", must include complete information concerning:
 - a. Setting of each string of casing, showing the size, grade, weight of casing set, hole size, setting depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing, depth of cementing tools used, casing test method and results, and the date work was done. Show the spud date on the first reports submitted.
 - b. Temperature or bond logs must be submitted for each well where the casing cement was not circulated to the surface.
- s. Auxiliary equipment to be used is as follows:
 - 1. Kelly cock
 - 2. No bit float is deemed necessary.
 - 3. A sub with a full opening valve.



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DRILLING PROGRAM

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5. Mud Program

a. The proposed circulating mediums to be employed in drilling are as follows:

<u>Interval</u>	Mud Type	Mud Wt.	Visc.	F/L	PH
0-500'	Air/Air Mist				
500-2,500'	Clear Water	8.4			
2,500'-TD	Gel Mud	8.4-9.8	35-45	8-10	9

There will be sufficient mud on location to control a blowout should one occur.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, static filtration loss, and Ph.

- b. Mud monitoring equipment to be used is as follows:
 - 1. Periodic checks will be made each tour of the mud system. The mud level will be checked visually.
- c. No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.
- d. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.
- e. The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.



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6. Evaluation Program

The anticipated type and amount of testing, logging and coring are as follows:

a. No drill stem tests are anticipated, however, if DST's are run, the following requirements will be adhered to:

Initial opening of drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer. However, DST's may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e. lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained from the authorized officer. Closed chamber DSTs may be accomplished day or night.

A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions. This would involve provided some means for reverse circulation.

Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

All engines within 100 feet of the wellbore that are required to "run" during the test shall have spark arresters or water cooled exhausts.

- b. The logging program will consist of the following logs: An array Induction log and DCL, CNL, ML will be run from T.D. to 500'.
- c. Selected sidewall cores will be run in the Mesa Verde and Wasatch formations.
- d. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic



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summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with form 3160-4. Samples (cutting, fluids, and/or gases will be submitted when requested by the authorized officer (AO).

- e. The anticipated completion program will be to test prospective zones in Mesa Verde and Wasatch Formations by perforating and fracture stimulation.
- f. Daily drilling and completion progress reports shall be submitted to the BLM in Vernal on a weekly basis.

7. Abnormal Temperatures or Pressures

- a. The expected bottom hole pressure is 3000 psi.
- b. No hydrogen sulfide gas is anticipated and no abnormal pressures or temperatures are anticipated.

8. Anticipated Starting Dates and Notification of Operations

- a. Drilling will commence November 15, 1998.
- b. It is anticipated that the drilling of this well will take approximately 7-10 days.
- c. The BLM in Vernal, Utah shall be notified of anticipated date of location construction commencement and of anticipated spud date.
- d. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.



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- e. The spud date will be reported orally to the AO within 48 hours after spudding. If the spudding occurs on a weekend or holiday, the report will be submitted on the following regular work day. The oral report will be followed up with a Sundry Notice.
- f. In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 3160-6 "Monthly Report of Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed with the Vernal BLM District Office, 170 South 500 East, Vernal, UT 84078.
- g. <u>Immediate Report:</u> Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.
- h. If a replacement rig is contemplated for completion operations, a "Sundry Notice" Form 3160-5 to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
- i. Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communications, not later than 5 days following the date on which the well is placed on production.
- j. Pursuant to Onshore Order No. 7, with the approval of the District Engineer, produced water may be temporarily disposed of into unlined pits for a period of up to 90 days. During the period so authorized, an application for approval of the permanent disposal method, along with the required water analysis and other information, must be submitted to the District Engineer.
- k. Pursuant to NTL-4A, lessees or operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. An application must be filed with the District Engineer and approval received, for any venting/flaring of gas beyond the initial 30 day or authorized test period.



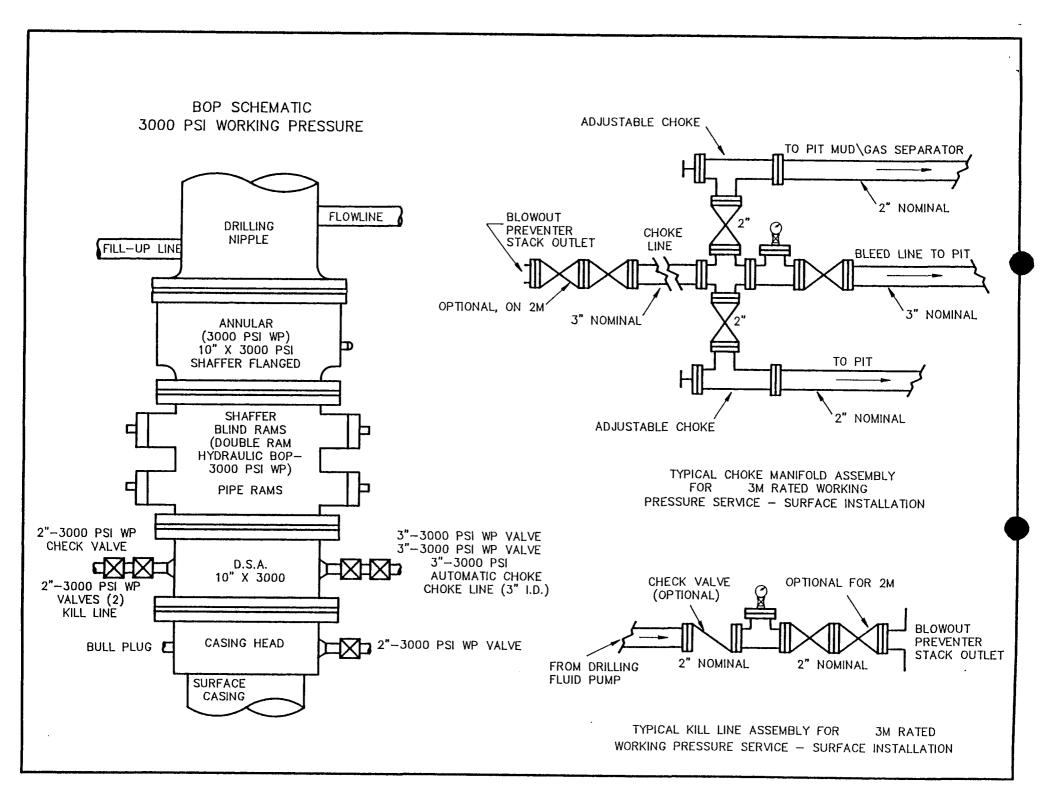
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l. A schematic facilities diagram as required by 43 CFR 3162.7-5 (b.9.d.), shall be submitted to the appropriate District Office within sixty (60) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (b.4.).

- m. A first production conference will be scheduled within 15 days after receipt of the first production notice.
- n. No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the SO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.
- o. Pursuant to Onshore Oil and Gas Order No. 1, lessees and operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in a manner which conforms with applicable Federal laws and regulations and with State and local laws and regulations to the extent that such State and local laws are applicable to operations on Federal or Indian lands.





NTIAL - TIGHT HOLE

Lease No. UTU-57455

SURFACE USE PLAN

Page 1

ONSHORE OIL & GAS ORDER NO. 1

NOTIFICATION REQUIREMENTS

Location Construction forty-eight (48) hours prior to construction of location and

access roads.

Location Completion prior to moving on the drilling rig.

Spud Notice at least twenty-four (24) hours prior to spudding the well.

twenty-four (24) hours prior to running casing and **Casing String and**

Cementing cementing all casing strings.

BOP and Related

twenty-four (24) hours prior to initiating pressure tests. **Equipment Tests**

First Production Notice

within five (5) business days after new well begins or production resumes after well has been off production for

more than ninety (90) days.

The subject well was originally staked at 601' FNL and 1780' FEL. The location was subsequently moved to avoid an archeological site. The new footages are 655' FNL and 1559' FEL.

The onsite inspection for the original wellsite was conducted on Thursday, August 27, 1998 at approximately 2:30 p.m. Weather conditions were warm and sunny. In attendance at the onsite inspection were the following individuals:

> Lisa Smith Permitco Inc. **Robert Kay Uintah Engineering and Land Surveying**

Byron Tolman Bureau of Land Management Rudy Myore Bureau of Land Management Danny Widner Rosewood Resources, Inc. Jim McQuillan Rosewood Resources, Inc.



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SURFACE USE PLAN

Page 2

1. Existing Roads

- a. The proposed well site is located approximately 31.1 miles southwest of Bonanza, Utah.
- b. Directions to the location from Bonanza, Utah are as follows:

From Bonanza proceed southerly for 16.9 miles. Turn left and proceed in a southwesterly direction for 7.8 miles. Turn left and proceed southerly for 1.7 miles. Turn right and proceed northerly for 0.5 miles. Turn left and proceed westerly for 3.0 miles. Turn left and continue westerly for 1.7 miles. Turn left and proceed south on an existing road for 0.6 miles. Turn right and proceed northwesterly for 0.6 miles along the new access route (flagged) to the location.

- c. For location of access roads within a 2-Mile radius, see Maps A & B.
- d. Improvement to 0.6 miles of existing road will be necessary as shown on Map "B".
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. Existing roads and newly constructed roads on surface under the jurisdiction of any Surface Managing Agency shall be maintained in accordance with the standards of the SMA.

2. Planned Access Roads

- a. The last 0.6 miles of existing road will be upgraded to BLM Class III standards. In addition, 0.6 miles of new access will be constructed. Water turnouts will be installed as needed.
- b. The maximum grade of the upgrade construction will be approximately 10%.



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Lease No. UTU-57455

SURFACE USE PLAN Page 3

- c. No turnouts are planned.
- d. Low water crossings will be installed where necessary along the last 2.5 miles of access. There are no major cuts and fills. No culverts and/or bridges will be required.
- e. The last 0.6 miles of access road was centerline flagged at the time of staking.
- f. The use of surfacing material is not anticipated, however it may be necessary depending on weather conditions.
- g. No cattleguards will be necessary at this time.
- h. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.
- i. Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service publication: <u>Surface Operating Standards for Oil and Gas Exploration and Development</u>, (1989).
- j. The road will be constructed/upgraded to meet the standards of the anticipated traffic flow and all weather road requirements.

 Construction/upgrading shall include ditching, draining, graveling, crowing and capping the roadbed as necessary to provide a well constructed safe road. Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot right-of-way will not be allowed. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided.



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SURFACE USE PLAN
Page 4

- k. If the well is productive, additional water drainage will be installed along the new portion of access road to keep the water off the road.
- l. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.
- m. A road right of way is required for approximately 1200 feet the access contained in Section 31, T11S R23E which is outside of the Hanging Rock Unit. In addition, ROW will be applied for in the SW SW of Section 32 across State of Utah lands. Enclosed is our check in the amount of \$175.00 for the minimum application and monitoring fees.

3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location.

- a. Water wells none
- b. Injection wells none
- c. Producing wells none
- d. Drilling wells none
- e. Shut-in wells none
- f. Temporarily abandoned wells none
- g. Disposal wells -none
- h. Abandoned wells none
- i. Dry Holes none



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SURFACE USE PLAN
Page 5

4. <u>Location of Tank Batteries and Production Facilities.</u>

- a. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted Juniper Green. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded.
- b. If storage facilities/tank batteries are constructed on this lease, the facility/battery or the wellpad shall surrounded by a containment dike of sufficient capacity to contain at a minimum, the entire contents of the largest tank within the facility/battery, unless more stringent protective requirements are deemed necessary by the authorized officer.
- c. A typical production layout is attached. If at the time of production it is determined that an alternate layout is necessary, a Sundry Notice will be submitted showing placement of all production facilities prior to construction.
- d. All loading lines will be placed inside the berm surrounding the tank battery.
- e. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried or anchored down from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.
- f. The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil and Gas Order No. 4 for liquid hydrocarbons and Onshore Oil and Gas Order No. 5 for natural gas measurement.



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SURFACE USE PLAN

Page 6

- g. If at any time the facilities located on public land and authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change), BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental or other financial obligation as determined by the authorized officer.
- h. Any necessary pits will be properly fenced to prevent any wildlife entry.
- i. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.
- j. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.
- k. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic.
- l. The road will be maintained in a safe useable condition.
- m. The surface pipeline will be 4" welded steel and will be 4,100 feet in length. The pipeline route is shown on Map "C".

5. <u>Location and Type of Water Supply</u>

- a. The proposed water source is the Rock House #5A producing well. The water permit number for this source is #49-1547.
- b. Water will be hauled to location over the access roads shown on Maps A and B.
- c. No water well will be drilled on this lease.



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SURFACE USE PLAN

Page 7

6. Source of Construction Material

- a. Surface and subsoil materials in the immediate area will be utilized.
- b. Any gravel used will be obtained from a commercial source.
- c. The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2.3. Construction material will not be located on lease.
- d. No construction materials will be removed from Federal land.

7. Methods of Handling Waste Disposal

- a. The reserve pit will be constructed so as not to leak, break, or allow discharge.
- b. If it is necessary to blast the pit area during construction, an inspection of the pit will be made by a representative of the BLM with a representative of Rosewood Resources, Inc. and it will be determined if a reserve pit liner is necessary. If fractured rock is encountered, the pit will be first lined with sufficient bedding (either straw or dirt) to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. More stringent protective requirements may be deemed necessary by the A.O.
- c. Burning will not be allowed. All trash will be contained in a trash cage and its contents removed at the end of drilling operations and hauled to an approved disposal sight.
- d. After first production, produced waste water will be confined to a unlined pit or storage tank for a period not to exceed ninety (90) days. During the 90-day period, in accordance with Onshore Order No. 7, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.



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SURFACE USE PLAN
Page 8

- e. Drill cuttings are to be contained and buried in the reserve pit.
- f. Any salts and/or chemicals which are an integral part of the drilling system will be disposed of in the same manner as the drilling fluid.
- g. A chemical porta-toilet will be furnished with the drilling rig.
- h. The produced fluids will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas salt water or other produced fluids will be cleaned up and removed.

8. Ancillary Facilities

There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

9. Well Site Layout

- a. The operator or his/her contractor shall contact the BLM Office at 435/789-1362 forty-eight (48) hours prior to construction activities.
- b. The reserve pit will be located on the south side of the location.
- c. The flare pit will be located downwind of the prevailing wind direction on the north side, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.
- d. The stockpiled topsoil (first six inches) will be stored on the west side of the location as shown on the Pit & Pad Layout. Topsoil along the access route will be windrowed on the uphill side. Trees will be piled separately from the topsoil.
- e. Access to the wellpad will be from the east as shown on the Pit & Pad Layout.



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SURFACE USE PLAN
Page 9

f. See Location Layout for orientation of rig, cross section of drill pad and cuts and fills.

- g. The location of mud tanks; reserve pit, trash cage; pipe racks; living facilities and soil stockpiles will be shown on the Location Layout.
- h. All pits will be fenced according to the following minimum standards:
 - 1. 39 inch net wire shall be used with at least one strand or barbed wire on top of the net wire (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
 - 2. The net wire shall be no more than 2-inches above the ground. The barbed wire shall be 3-inches above the net wire. Total height of the fence shall be at least 42-inches.
 - 3. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
 - 4. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
 - 5. All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.
- i. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until cleanup.
- j. Water drainage onto the location from the uphill side will be re-routed around the pad, after construction, to the most feasible directions.



c. CONF ENTIAL - TIGHT HOLE
Lease No. UTU-57455

ONSHORE ORDER N
Rosewood Resources, Inc.
Hanging Rock I #6-2
655' FNL and 1559' FEL
Lot 2 (NW NE) Sec. 6, T12S - R23E
Uintah County, Utah

SURFACE USE PLAN

Page 10

10. Plans for Restoration of Surface

Producing Location

- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash and junk not required for production.
- b. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1.
- c. If a plastic nylon reinforced liner is used it shall be torn and perforated before backfilling of the reserve pit.
- d. The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed and all cans, barrels, pipe, etc., will be removed.
- e. After the reserve pit is reclaimed, the water diversion structure will be constructed on previously disturbed soil to divert runoff water around the location to the east.
- f. Reclamation of unused disturbed areas on the well pad/access road no longer needed for operations, such as cut slopes, and fill areas will be accomplished by grading, leveling and seeding as recommended by the Authorized Officer.

The seed mixture requested by the BLM for reclamation of the drillsite is as follows:

<u>Species</u>	Lbs. PLS/Acre
Fourwing Saltbush	4
Shadscale	2
Needle and Thread	3
Indian Ricegrass	3



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SURFACE USE PLAN
Page 11

Seeding will be performed in the fall after September 15 or until permanent ground freeze. Any other seeding period will require the approval of the authorized officer of the BLM. Seed will be broadcast and walked in with a dozer.

g. The topsoil stockpile will be seeded with Fourwing Saltbush at the rate of 5 lbs./acre

Dry Hole

h. At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and BLM will attach the appropriate surface rehabilitation conditions of approval.

11. Surface Ownership

Access Roads - All roads are County maintained or managed by the Bureau of Land Management or State of Utah.

Wellpad - The well pad is located on lands managed by the BLM.

12. Other Information

- a. A Class III archeological survey has been conducted by Grand River Institute. The wellpad has been relocated to avoid an archeological site. A copy of this report is attached.
- b. The operator is responsible for informing all persons in the areas who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:



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SURFACE USE PLAN Page 12

-whether the materials appear eligible for the National Register of Historic Places;

- -the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
- -a time frame for the AO to complete and expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.
- c. The operator will control noxious weeds along rights-of-way for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds may be obtained from the BLM, or the appropriate County Extension Office. On BLM administered land it is required that a Pesticide Use Proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.
- d. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure.
- e. All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.



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SURFACE USE PLAN
Page 13

f. A complete copy of the approved APD shall be on location during construction of the location and drilling activities.

- g. There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended or abandoned will be identified in accordance with 43 CFR 3162.
- h. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.
- i. This permit will be valid for a period of one year from the date of approval. An extension period may be granted, if requested, prior to the expiration of the original approval period. After permit termination, a new application will be filed for approval for any future operations.
- j. The operator or his contractor shall contact the BLM Offices at 435/789-1362 48 hours prior to construction activities.
- k. The BLM Office shall be notified upon site completion prior to moving on the drilling rig.
- l. In the event after-hours approvals are necessary, please contact one of the following individuals:

Ed Forsman Wayne Bankert BLM Fax Machine Petroleum Engineer 435/789-7077 Petroleum Engineer 435/789-4170 435/789-3634



CONF ENTIAL - TIGHT HOLE

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SURFACE USE PLAN

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13. <u>Lessee's or Operator's Representative and Certification</u>

<u>Permit Matters</u> <u>Drilling & Completion Matters</u>

PERMITCO INC. ROSEWOOD RESOURCES, INC.

Lisa L. Smith P.O. Box 1668 14421 Weld County Rd. 10 Vernal, UT 84078 Ft. Lupton, Co 80621 435/789-0414 (O)

303/857-9999 435/828-6100 (M) - Danny Widner

435/828-6438 (M) - Salty Miller

435/789-0823 (H)

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Rosewood Resources, Inc. and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

This statement is subject to the provisions of 18.U.S.C. 1001 for the filing of a false statement.

October 23, 1998

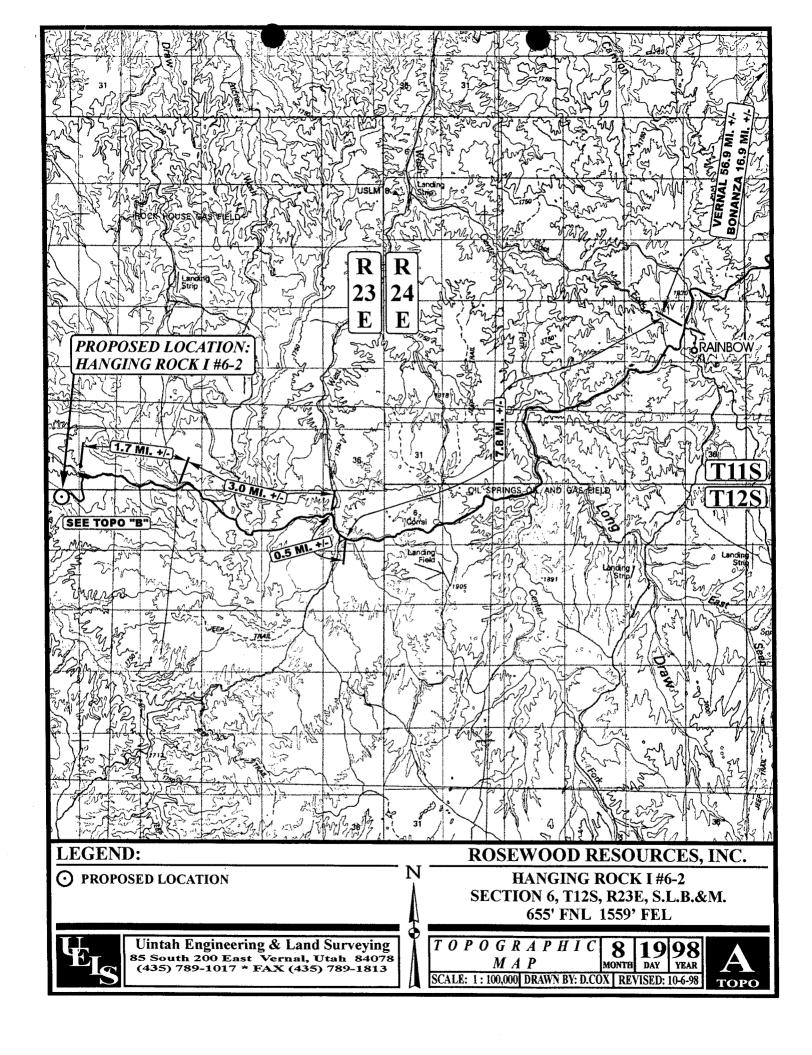
Date:

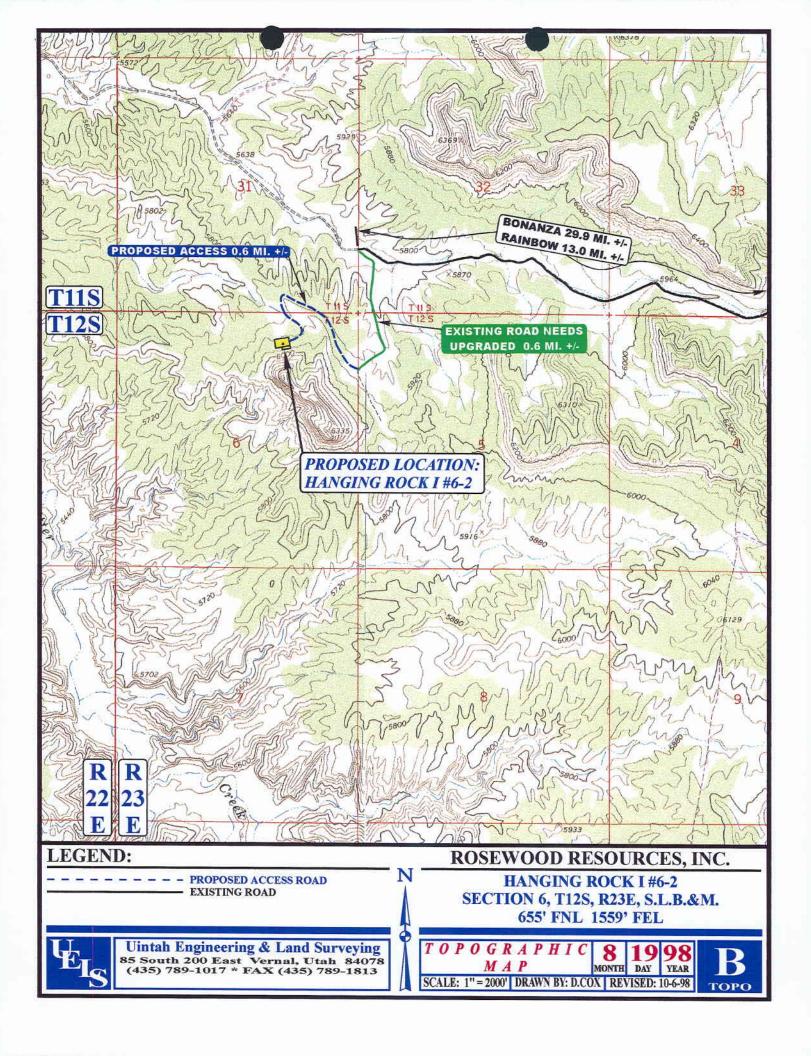
Lisa L. Smith - PERMITCO INC.

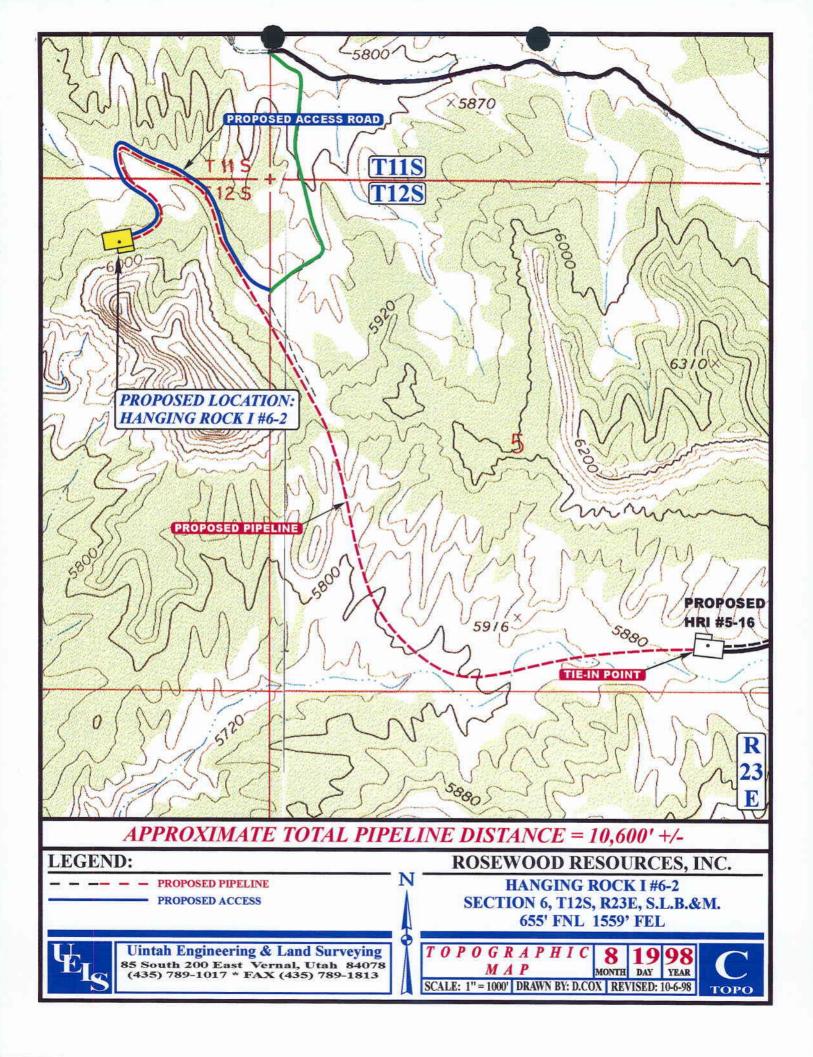
Authorized Agent for:

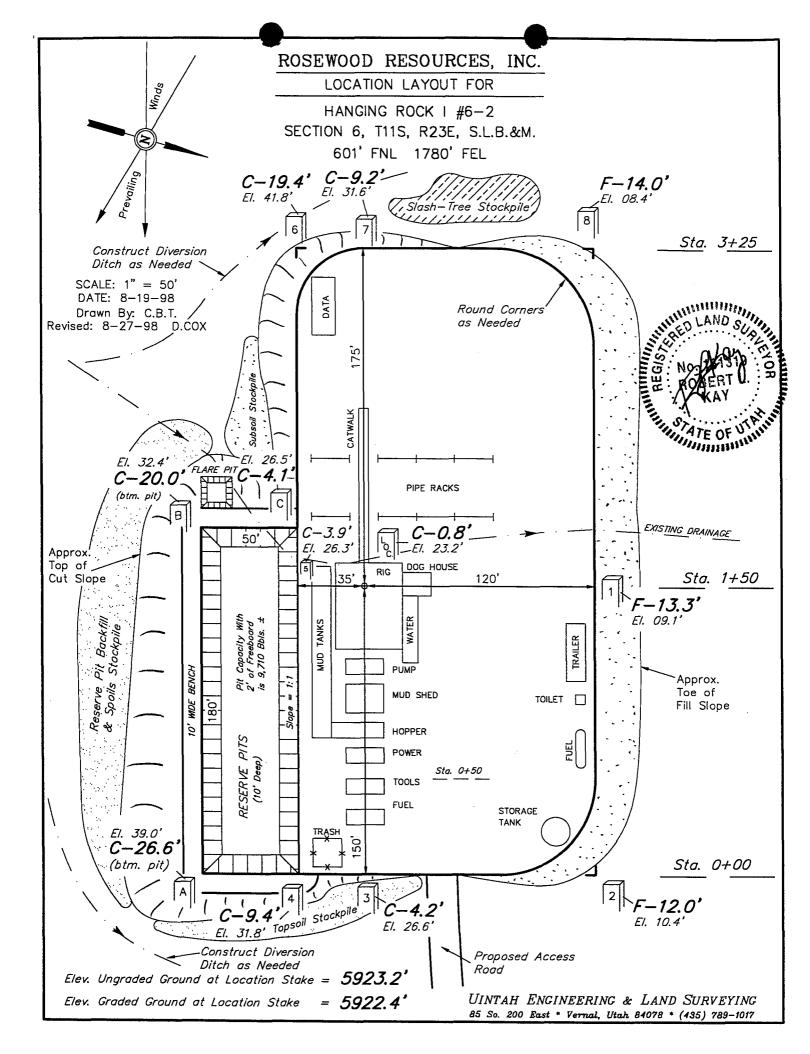
ROSEWOOD RESOURCES, INC.

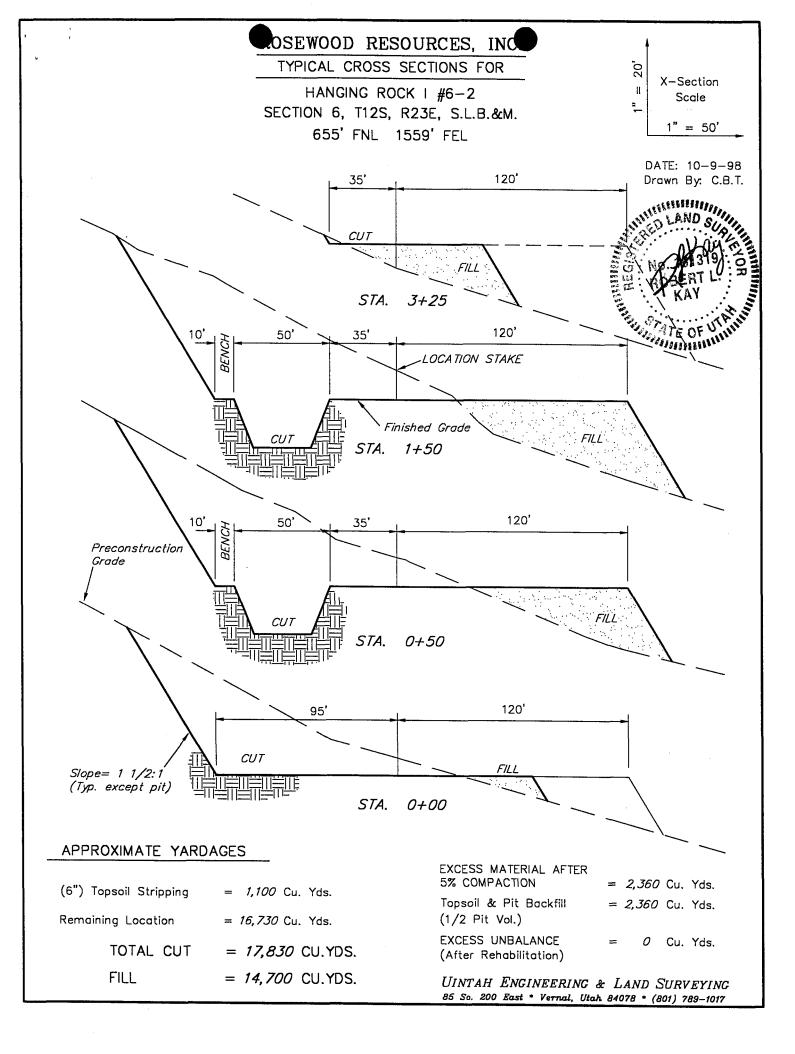






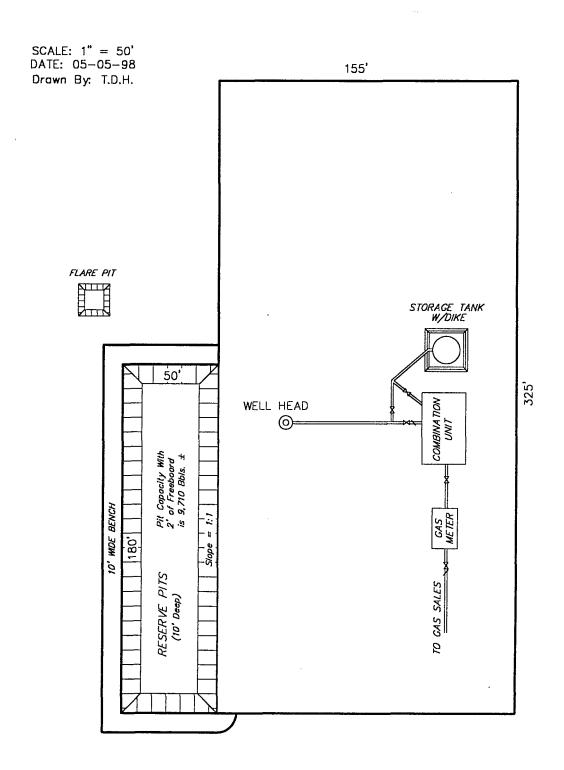








Hanging Rock I #6-2 Lot 2 (NW NE) Sec. 6, T12S – R23E 655' FNL and 1559' FEL



There are no federal stipulations at this time.



A Wastewater Permit will be filed with the Uintah Basin District Health Department by Mountain West Oilfield Services on behalf of Rosewood Resources, Inc.



Rosewood Hangenz Roch

☆ Grand River Institute **❖**

P.O. Box 3543 & Grand Junction, CO 81502 & 970/245-7868 FAX 970/245-6317

October 9, 1998

Rosewood Resources, Inc. 265 E. 100 S. Vernal, UT 84078

Attn: Danny Widner

Re: GRI Project No. 9848 -- Class III cultural resource inventory of four proposed Hanging Rock I well locations, related accesses and pipeline routes in Uintah County, Utah

Dear Mr. Widner:

Enclosed are two copies of our final report for the project cited above. Additionally, two copies have been forwarded to the BLM Vernal District Office and one copy was sent to Permitco Inc. Please call me if you have any questions.

Sincerely,

Carl E. Conner

Cal E. Carry

Director

Enc.

Distribution:

Blaine Phillips, BLM Vernal District Office Lisa L. Smith, Permitco Inc.

COVER PAGE for the Utah Division of State History Preservation Office

Project Name: CRI report on the pr	oposed Class III cultural resource
inventory of four proposed Hanging Roc	k I well locations, related accesses
and pipeline routes in Uintah County,	Utah, for Rosewood Resources, Inc.
[GRI Proj. 9848 10/8/98]	
State Proj. No.: <u>U98-GB-0526b</u>	Report Date: 10/8/98
Principal Investigator: Carl E. Conner	
Field Supervisor(s): Carl E. Conner	
Acreage Surveyed Intensive: 27 acres Recon/I	Intuitive:acres
7.5' Series USGS Map Reference(s): Buck	Camp Canyon and Archy Bench SE
Sites Reported	
Archaeological Sites Revisits (no inventory form update)	0
Revisits (updated IMACS site inventory form attached)	0
New recordings (IMACS site inventory form attached)	2 42UN2581, 42UN2582
Total Count of Archaeological Sites	<u> </u>
Historic Structures (USHS 106 site info form attached)	
Total National Register Eligible Sites	
Paleontological Localities	0
Checklist of Required Items	
Location Clearly Marked ar 4 Paleontological locality f	Maps With Surveyed/Excavated Area ntory Forms, Including 5' Series USGS Map w/ the Site nd Labeled w/ the Smithsonian No.

Materials

Department of the Interior Bureau of Land Management Utah State Office

Project		_u	8,-10	3 ₁ B ₁ -10	15,2,6,b,
uthorization	No.				· · · · · · · · · · · · · · · · · · ·

(2/85)

Utah State Office	Report Acceptable Yes No
Summary Report of Inspection for Cultural Resources	Mitigation Acceptable Yes No Comments:
l. Report Title <u> P r o p o s e d H a n</u>	q i n q R 0 c k I # 4 - 1 4 W e 1 1
2. Development Company <u>Rosewood Reso</u> u	arces, Inc.
3. Report Date $\frac{1}{1}$, 0, October $\frac{1}{1}$, 9,9,8	4. Antiquities Permit No. 98-UT-54939
5. Responsible Institution $\frac{1}{2}G_{1}R_{1}A_{1}N_{1}D_{1}$	R ₁ I ₁ V ₂ E ₁ R ₁₋₁ I ₁ N ₁ S ₁ County <u>Uintah</u>
5. Fieldwork Location: TWN 11,2,S, 1	Range <u> 2 3 E </u> Section(s) <u> 0 4 0 9 </u>
TWN	Range Section(s)
SE=Sevier River, HM=Henry Mounta	WS=Warm Springs, BC=Book Cliffs, HR=House Range, ains, BE=Beaver River, DX=Dixie, KA=Kanab, rand, SR=San Raphael, DM=Diamond Mountain
nventory of the proposed well location circles spaced 10 meters apart around to plot. The 0.6 mile access/pipeline rou	es: A 100 percent pedestrian cultural resources was made by a two-person crew walking concentric the staked center to cover a 750 feet diameter-10 acreste was also inspected by a two-person crew walking art along the flagged center line to a total width of
Linear Miles Surveyed <u>101.161</u>	_ 10. Inventory Type <u> I </u>
and/or Definable Acres Surveyed :1:0: : : and/or Legally Undefinable Acres Surveyed	I=Intensive S=Statistical
.1. Description of Findings (attach app No cultural resources were identi	
12. Number Sites found 10: 11: 1 (No sites = 0)	13. Collection $\frac{1}{N!}$ (Y=Yes N=No)
.4. Actual/Potential National Register	Properties Affected: None.
5. Literature Search, Location/Date:	BLM Vernal Dist. Office / September 23, 1998
.6. Conclusion/Recommendations: No significant historic properties Archaeological clearance is recomme	were identified within the area of direct impact.
.7. Signature of Administrator & Field	Supervisor: Administrator Carl E. Conner
For extra locations use additional 810	Field Supervisor

U.S. Department of the Inter-Bureau of Land Management Utah State Office

8,-,G,B,-,0,5,2,6,b, Project Authorization No. Yes __ No __ Report Acceptable

Summary Report of Inspection for Cultural Resources	Mitigation Acceptable Yes No Comments:
-	nigiinigi Rioiciki II # 5 - 1 6 Wieilili
2. Development Company <u>Rosewood Reso</u>	urces, Inc.
3. Report Date 1101 October 119191	8. 4. Antiquities Permit No. 98-UT-54939
5. Responsible Institution $\frac{1}{1}G_1R_1A_1N_1D_1$	RII V ER INS County <u>Uintah</u>
5. Fieldwork Location: TWN 11,2,5, 1	Range <u>1213 E: 1</u> Section(s) <u>1014 1015 </u>
TWN	Range Section(s)
SE=Sevier River, HM=Henry Mount	WS=Warm Springs, BC=Book Cliffs, HR=House Range, ains, BE=Beaver River, DX=Dixie, KA=Kanab, rand, SR=San Raphael, DM=Diamond Mountain
inventory of the proposed well locatio circles spaced 10 meters apart around plot. The 0.4 mile access/pipeline ro	res: A 100 percent pedestrian cultural resources on was made by a two-person crew walking concentric the staked center to cover a 750 feet diameter-10 acresute was also inspected by a two-person crew walking eart along the flagged center line to a total width of
9.	10. Inventory Type II
Linear Miles Surveyed 10:14 and/or Definable Acres Surveyed 11:01 1 and/or Legally Undefinable Acres 1:11 Surveyed	! ! ! I=Intensive S=Statistical
ll. Description of Findings (attach ap No cultural resources were ident	opendices, if appropriate)
12. Number Sites found 10, 11 (No sites = 0)	13. Collection No (Y=Yes N=No)
14. Actual/Potential National Register	r Properties Affected: None.
15. Literature Search, Location/Date:	BLM Vernal Dist. Office / September 23, 1998
16. Conclusion/Recommendations: No significant historic properties Archaeological clearance is recommendations	s were identified within the area of direct impact. mended.
17. Signature of Administrator & Field	d Supervisor: Administrator Cal E. Conner
	Field Supervisor
*For extra locations use additional 83	100-3 forms UT 8100-3 (2/85)

U.S. Department of the Inter-Bureau of Land Management Utah State Office

Project 81-161B1-101512161b1 Authorization No.

Report Acceptable Yes __ No __

	Summary Report of Mitigation Acceptable Yes No Inspection for Cultural Resources Comments:
1.	Report Title P r o p o s e d H a n q i n q R o c k I # 6 - 2 W e l l
2.	Development Company Rosewood Resources, Inc.
3.	Report Date 110, October 11998 4. Antiquities Permit No. 98-UT-54939
5.	Responsible Institution ${}_{ }G_{1}R_{1}A_{1}N_{1}D_{1}$ ${}_{ }R_{1}I_{1}V_{1}E_{1}R_{1}$ ${}_{ }I_{1}N_{1}S_{1}$ County <u>Uintah</u>
б.	Fieldwork Location: TWN $11,2,5$ Range $2,3,E$ Section(s) $0,5$ $0,6$
	TWN 111151 Range $23E1$ Section(s) 311132
7.	Resource Area <u>B.C.</u> PO=Pony Express, BR=Bear River, WS=Warm Springs, BC=Book Cliffs, HR=House Range, SE=Sevier River, HM=Henry Mountains, BE=Beaver River, DX=Dixie, KA=Kanab, ES=Escalante, SJ=San Juan, GR=Grand, SR=San Raphael, DM=Diamond Mountain
inv cir plo par	Description of Examination Procedures: A 100 percent pedestrian cultural resources ventory of the proposed well location was made by a two-person crew walking concentric rcles spaced 10 meters apart around the staked center to cover a 750 feet diameter-10 acrept. The 2.0 mile access/pipeline route was also inspected by a two-person crew walking rallel transects spaced 10 meters apart along the flagged center line to a total width of 0 feet.
9.	10. Inventory Type $_{1}\overline{1}_{1}$
	Linear Miles Surveyed 120. and/or
	Definable Acres Surveyed 1101111 I=Intensive
	and/or S=Statistical Legally Undefinable Acres <u> </u>
11.	. Description of Findings (attach appendices, if appropriate) One prehistoric site, 42UN2581, was located and recorded (see attached report and form).
12	. Number Sites found $11 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1$
14	. Actual/Potential National Register Properties Affected: None.
15	. Literature Search, Location/Date: BLM Vernal Dist. Office / September 23, 1998
16	. Conclusion/Recommendations: One prehistoric site 42UN2581 was located and recorded. Avoidance and monitoring of resource during construction is recommended.
17	. Signature of Administrator & Field Supervisor: Administrator Carl E. Conner

Field Supervisor_____

^{*}For extra locations use additional 8100-3 forms

U.S. Department of the Interior Bureau of Land Management Utah State Office

Summary Report of

Project Authorization No.	1U 8,-,G,B,-	0,5,2,6,b,
Report Acceptable	Yes	No

(2/85)

I	nspection for Cultural Resources Comments:
1.	Report Title P:r:o:p:o:s:e:d: H:a:n:g:i:n:g: R:o:c:k: I: #:9:-:1:1: W:e:1:1: I:
2.	Development Company <u>Rosewood Resources, Inc.</u>
3.	Report Date 110, October 11998 4. Antiquities Permit No. 98-UT-54939
5.	Responsible Institution $_{1}G_{1}R_{1}A_{1}N_{1}D_{1}$ $_{1}R_{1}I_{1}V_{1}E_{1}R_{1}$ $_{1}I_{1}N_{1}S_{1}$ County Uintah
6.	Fieldwork Location: TWN 1125 Range 23E Section(s) 09 115 16 1
	TWN Range Section(s)
7.	Resource Area <u>B C </u> PO=Pony Express, BR=Bear River, WS=Warm Springs, BC=Book Cliffs, HR=House Range, SE=Sevier River, HM=Henry Mountains, BE=Beaver River, DX=Dixie, KA=Kanab, ES=Escalante, SJ=San Juan, GR=Grand, SR=San Raphael, DM=Diamond Mountain
inv cir plo par	Description of Examination Procedures: A 100 percent pedestrian cultural resources entory of the proposed well location was made by a two-person crew walking concentric cles spaced 10 meters apart around the staked center to cover a 750 feet diameter-10 acre t. The 1.6 mile access/pipeline route was also inspected by a two-person crew walking callel transects spaced 10 meters apart along the flagged center line to a total width of feet.
9.	10. Inventory Type II.
	and/or Definable Acres Surveyed 11.0: 1
11.	Description of Findings (attach appendices, if appropriate) One prehistoric site, 42UN2582, was located and recorded (see attached report and form).
12.	Number Sites found $11 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1$
14.	Actual/Potential National Register Properties Affected: None.
15.	Literature Search, Location/Date: BLM Vernal Dist. Office / September 23, 1998
16.	Conclusion/Recommendations: One prehistoric site 42UN2581 was located and recorded. Avoidance and monitoring of resource during construction is recommended.
17.	Signature of Administrator & Field Supervisor: Administrator Carl E. Conner
* F^	Field Supervisor
7.0	r extra locations use additional 8100-3 forms UT 8100-3

Cultural Resource Inventory Report

on

Four Proposed Hanging Rock I Well Locations, Related Accesses and Pipeline Routes in Uintah County, Utah

for

Rosewood Resources, Inc.

Declaration of Positive Findings

GRI Project No. 9848

October 8, 1998

Prepared by

Grand River Institute
P.O. Box 3543
Grand Junction, Colorado 81502
BLM Antiquities Permit No. 98UT-54939
UDSH Project Authorization No. U98-GB-0526b

Carl E. Conner, Principal Investigator

Submitted to

The Bureau of Land Management Vernal District Office 170 South 500 East Vernal, Utah 84078

Abstract

Grand River Institute conducted a Class III cultural resources inventory of four proposed well locations, related access and pipeline routes in Uintah County, Utah, for Rosewood Resources, Inc. under BLM Antiquities Permit No. 98UT-54939 and Utah Division of State History (UDSH) Project Authorization No. U98-GB-0526b. This work was done to meet requirements of Federal and State laws that protect cultural resources. A files search conducted through the BLM Vernal District Office on 23 September 1998 indicated no cultural resources were previously recorded in the study area. Field work was performed between 23 and 25 of September. A total of about 156 acres was inspected. Two prehistoric sites (42UN2581-2582) were recorded. Both were field evaluated as significant.

Site 42UN2581, a prehistoric campsite, lies within the original location for the proposed Hanging Rock I #6-2 well location. An alternate area to the east was inspected so the site can be avoided. Site 42UN2582, a wickiup locality, lies north of the newly upgraded road and should be avoided by the proposed pipeline. Monitoring of construction work in the vicinities of each site is recommended.

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Introduction

At the request of Rosewood Resources, Inc., and the Bureau of Land Management, a cultural resource inventory was conducted for four proposed well locations, related access and pipeline routes in Uintah County, Utah. Carl E. Conner (Principal Investigator), Barbara J. Davenport, and Sarah Koeman of Grand River Institute conducted this Class III (intensive) inventory under BLM Antiquities Permit No. 98UT-54939 and Utah Division of State History (UDSH) Project Authorization No. U98-GB-0526b. This work was done to meet requirements of Executive Order 11593, the National Environmental Policy Act of 1969, and other Federal and State laws and regulations that protect cultural resources. A files search conducted through the BLM Vernal District Office on 23 September 1998 indicated no cultural resources were previously recorded in the study. Field work was performed between 23 and 25 of September. A total of about 156 acres was inspected. Two prehistoric sites (42UN2581-2582) were recorded. Both were field evaluated as significant.

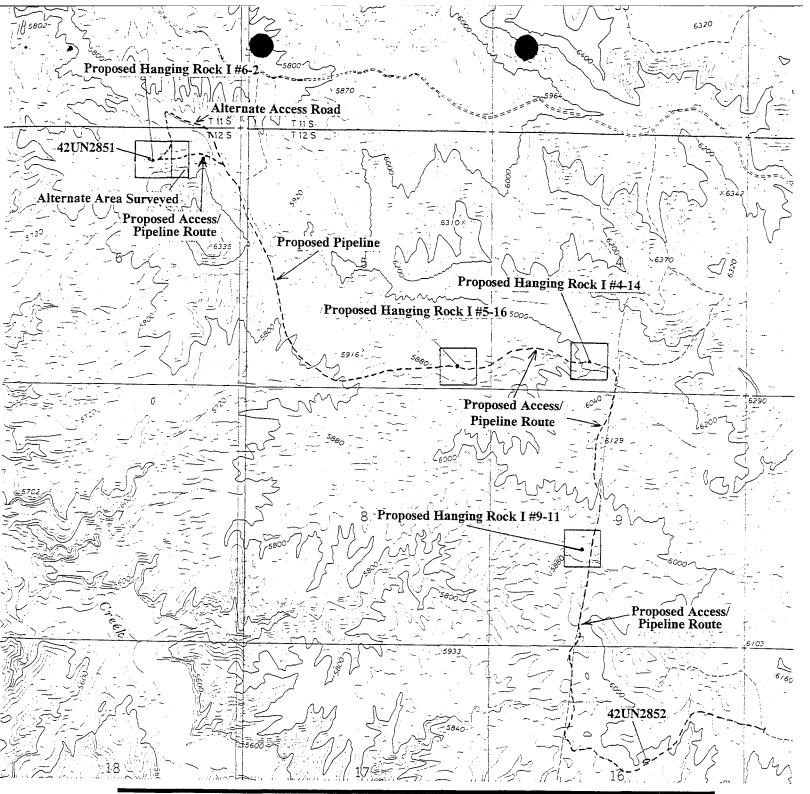
Location of Project Area

The study area lies 60.0 miles south of Vernal, Utah, Uintah County. The well units, access and pipeline routes are located in T. 11S., R. 23 E., Section 31; and, T. 12S., R. 23 E., Sections 4, 5, 6, 9, 15 and 16; SLBM. Figure 1 shows the study areas and the locations of the recorded cultural resources.

Environment

The project area is within the major geologic subdivision of the Colorado Plateau known as the Uinta Basin Section. In Utah, this section extends from the Uinta Mountains on the north to the Book Cliffs on the south. It is a broad downwarp into which Quaternary-and Tertiary-age deposits were made from the surrounding mountains which include Holocene and Pleistocene pediment deposits, and Eocene-age fluvial and lacustrine sedimentary rocks (Rigby 1976:xi). Physiographically, the basin includes the Uinta basin in the northern portion and the Book Cliffs/Roan Plateau in the south portion. The Green River Formation is are predominant in the study. Soils encountered were rocky, shaley, silty, and sandy loams. They are formed in residuum from, and often expose, the underlying formation.

Elevations in the project area are average about 6000 feet. The terrain varies from canyon bottom to ridge top. In the lower elevations the vegetation communities include greasewood and big sagebrush. The higher elevations have pinyon/juniper forest mixed with clusters of service berry and low sagebrush. Regional faunal inhabitants include elk, deer, black bear, coyote, mountain lion, cottontails, and raptors.



Composite of Buck Camp Canyon and Archy Bench SE Quadrangles
Utah--Uintah County / Photorevised 1987
USGS 7.5' Series (topographic) / Scale 1:24000
Contour interval 40 feet
T.11S. and T. 12S., R.23E., S.L.B.M.

Figure 1. Project location map for the Class III cultural resources inventory for four proposed Hang Rock I well locations, related access and pipeline routes in Uintah County, Utah, for Rosewood Resources, Inc. Areas surveyed for cultural resources are highlighted and prehistoric sites are indicated. [GRI Project No. 9848, 10/08/98]

A cool, mid-latitude steppe climate prevails. Annual precipitation of this elevation range is between 10 and 14 inches. Temperatures range from 100°F in the summer to -40°F in January. Paleoenvironmental data are scant, but it is generally agreed that gross climatic conditions have remained fairly constant over the last 12,000 years. However, changes in effective moisture, and cooling-warming trends probably affected the prehistoric occupation of the region.

Files Search

A files search conducted through the BLM Vernal District Office on 23 September 1998 indicated no cultural resources were previously recorded in the study area.

Regional archaeological studies suggest nearly continuous human occupation of northeastern Utah for the past 12,000 years. Evidence of the Paleoindian Tradition, the Archaic Tradition, Fremont Culture, and Protohistoric/Historic Utes has been found. Historic records suggest occupation or use by EuroAmerican trappers, settlers, miners, and ranchers as well. Overviews of the prehistory and history of the region are provided in the Utah BLM Cultural Resource Series No. 5, Sample Inventories of Oil and Gas Fields in Eastern Utah (Nickens and Larralde 1980).

Study Objectives _

The purpose of the study was to identify and record all cultural resources within the area of potential impact and to assess their significance and eligibility to the National Register of Historic Places (NRHP). The overall site density for the Seep Ridge area is 2.34 sites per square mile (Larralde and Chandler 1980:137).

Paleontological resources were also considered in the inspection. However, a final evaluation of those resources must be provided by a paleontologist permitted by the State of Utah.

Field Methods

A Class III, 100% pedestrian, cultural resources survey of the proposed well locations was made by walking a series of concentric circles around the flagged center to a diameter of 750 feet. The related access and pipeline routes were surveyed by walking a zigzag transect centered on the flagged line to cover a corridor 200 feet wide. Exceptions to these methods include an additional 5-acre plot that was surveyed east of the Hanging Rock I #6-2 after an archaeological site was found. A total of about 156 acres was intensively surveyed.

Cultural resources were sought as surface exposures and were characterized as sites or isolated finds. Sites were defined by the presence of six or more artifacts and/or significant feature(s) indicative of patterned human activity. Isolated finds were defined by the presence of 1 to 5 artifacts apparently of surficial nature. Cultural resources encountered were to be recorded to standards set by the Preservation Office of the Utah Division of State History.

Study Findings and Management Recommendations

As expected, cultural resources were encountered during the survey; no paleontological resources were identified. Site 42UN2581, a small prehistoric camp, and site 42UN2582, a wickiup locality, were recorded. All are located on BLM managed lands. This portion of the report describes these findings and discusses site significance evaluation.

Site Significance

The National Historic Preservation Act of 1966 (NHPA) directs the BLM to ensure that BLM-initiated or authorized actions do not inadvertently disturb or destroy significant cultural resource values. Significance is a quality of cultural resource properties that qualifies them for inclusion in the NRHP. The statements of significance included in this report are field assessments to support recommendations to the BLM and State Historic Preservation Officer (SHPO). The final determination of site significance is made by the BLM or State Lands Office in consultation with the SHPO and the Keeper of the Register.

The Code of Federal Regulations was used as a guide for the in-field site evaluations. Titles 36 CFR 50, 36 CFR 800, and 36 CFR 64 are concerned with the concepts of significance and (possible) historic value of cultural resources. Titles 36 CFR 65 and 36 CFR 66 provide standards for the conduct of significant and scientific data recovery activities. Finally, Title 36 CFR 60.6 establishes the measure of significance that is critical to the determination of a site's NRHP eligibility, which is used to assess a site's research potential:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and a) that are associated with events that have made a significant contribution to the broad patterns of history; or b) that are associated with the lives of persons significant in our past; or c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or d) that have yielded, or may be likely to yield, information important in the prehistory or history.

In the prehistoric site evaluation, category "d)" was used as the measure of significance.

A moderate approach was used in making the site evaluation. This approach reflects a restraint in the interpretation of the evaluative criteria while not allowing common pitfalls to occur. As the National Park Service (n.d.) has pointed out, "any archaeological resource is potentially eligible if one can legitimately argue that it is likely to be associated with a cultural pattern, process, or activity important to the history or prehistory of its locality, the United States, or humanity as a whole, provided its study can contribute to an understanding of that pattern, process, or activity." Pitfalls occur when sites are judged significant by their size, complexity, and age; that is, those that are large, multicomponent, older sites are considered more significant than the small single component variety.

Site Descriptions

This section provides a general description of the sites. Detailed information is provided in Appendix A: UDSH Site Forms.

Site 42UN2581 is a small, prehistoric open camp located on a north-trending bench overlooking a tributary canyon of Bitter Creek at elevation 5920 feet. The site is protected by a dwarf juniper forest. It consists of a 1.5m diameter area of ashy- soil containing charcoal bits, one projectile point base, two obsidian flakes, 1 white chert flake, 2 orange/black chert flakes (burnt), and 5+ small pieces of burnt bone. The projectile point base is unnotched and identified as a Cottonwood Triangular, which is found in Early Numic sites throughout the Northern Colorado Plateau and dates ca. AD 1300-1700 (Holmer 1986:108). The artifacts were highly concentrated although the ashy area was not well defined. Also recorded was a large quartzite biface tool located about 1.5m northeast of the feature. Soil in the area of the feature appears to have some depth (25+ cm) even though some of the surrounding ridge tops are shaley with shallow soils.

The site is undisturbed except by erosion that occurs along the edge of a small wash located 4m east of the hearth. Subsurface cultural deposits are likely, but testing will be required before a final determination of eligibility can be made. Accordingly, the site is field evaluated as significant.

Management Recommendation: The site lies within the original location for the Hanging Rock I #6-2, and should be avoided or preserved through excavation.

Site 42UN2582 is a small, prehistoric open camp/wickiup locality situated on a south-trending bench northeast of Bitter Creek at elevation 5980 feet. It consists of two collapsed wickiup structures associated with a group of dwarf juniper trees within an area measuring 14m in diameter. The east cluster contains an estimated 10 whole and fragmentary poles that measure(d) between 2.5 and 3.0m long. The base size of these poles averages 10cm in

diameter. A portion of one pole hangs in a live tree. A second group lies just southwest of the first and contains an estimated seven posts. These are shorter, measuring about 2m in length, and have a larger average diameter of 16cm. Both clusters of poles likely formed free-standing structures. No artifacts or hearth features were identified. The site is likely attributable to the Historic Ute and probably dates ca. AD 1800-1900.

The site is undisturbed but a newly upgraded trail lies within ten meters of the structures. This disturbance will be the location of the proposed new road/pipeline route. Subsurface cultural deposits are possible, testing by excavation and scanning using a metal detector is advised. The site is field evaluated as significant because of its good condition and because it may yield additional significant information concerning the Historic Ute occupation of the region.

<u>Management Recommendation</u>: The site lies within 30 feet of the proposed new road/pipeline route, and should be avoided or preserved through data retrieval.

Determinations of Effect

The eligibility determination and consultation process on federal lands is guided by Section 106 of the NHPA (36 CFR 60, 63, and 800). Inventory to identify, evaluate, and mitigate potential effects to cultural resources affected by an undertaking is the first step in the Section 106 process. BLM actions cannot be authorized until the Section 106 process is completed (36 CFR 800.3). Final determinations of National Register eligibility and effect should be sought from the controlling federal agencies in consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation.

The sites were assessed in terms of professional discretionary observations concerning the degree of effect, according to criteria outlined in 36 CFR 800.3. Since both sites were field evaluated as significant, they were evaluated for probable effect or adverse effect to be caused by well pad and road/pipeline construction. Secondary impact from the effects of the construction activities (erosion, etc.), and the potential for vandalism caused by the increased activity and access in the area should be addressed in any final determinations of effect.

Site 42UN2581, a prehistoric campsite, lies within the original location for the proposed Hanging Rock I #6-2 well location. An alternate area to the east was inspected so the site can be avoided. Site 42UN2582, a wickiup locality, lies north of the newly upgraded road and should be avoided by the proposed pipeline. Monitoring of construction work in the vicinities of each site is recommended. Figures 2 and 3 shows the relationship between each site and the potential area of direct impact. For additional information, refer to the site forms in Appendix A.

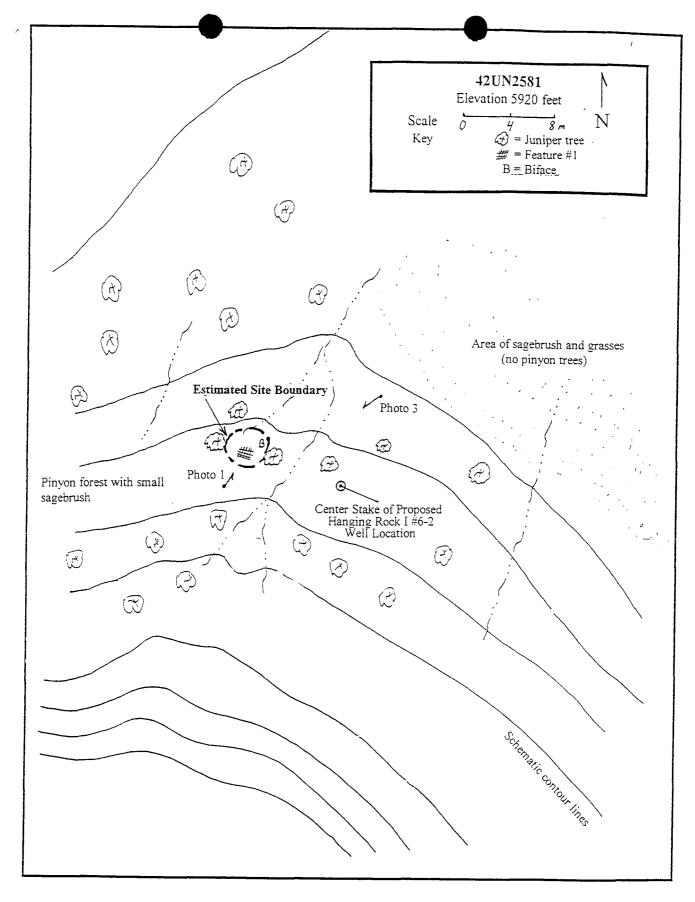


Figure 2. Sketch map-to-scale showing the relationship of site 42UN2581 to the proposed Hanging Rock I #6-2 well location center stake.

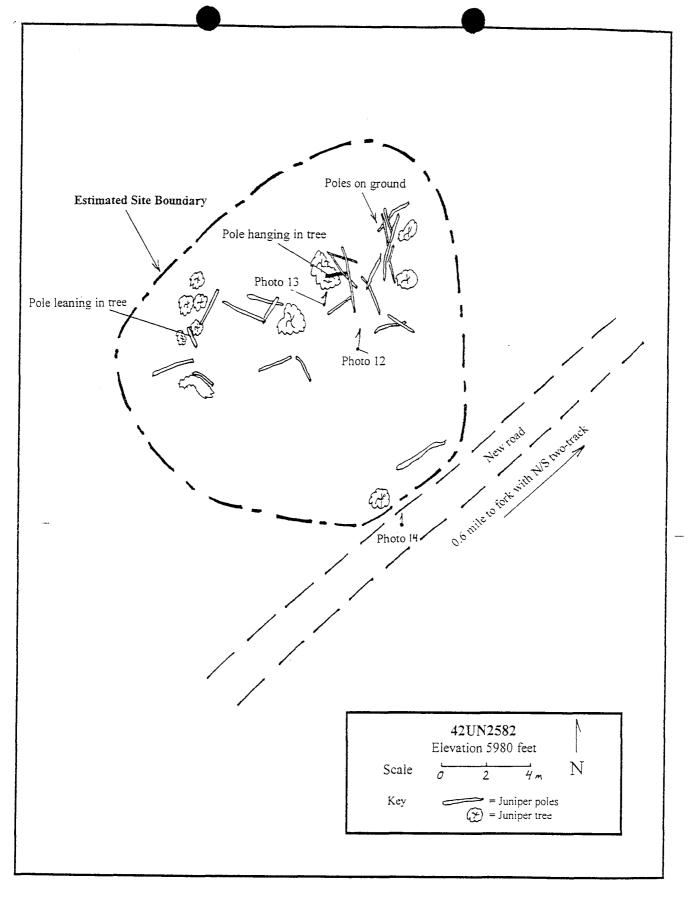


Figure 3. Sketch map-to-scale showing the relationship of site 42UN2582 to the proposed new road/pipeline route to the Hanging Rock I #9-11 well location.

References

Holmer, Richard N.

1986 Common Projectile Points of the Intermountain West. In <u>Anthropology of the Desert West</u>, ed. by Carol G. Conid and Don D. Fowler, pp. 91-115.

University of Utah Anthropological Papers No. 110. Salt Lake City.

Larralde, Signa L. and Susan M. Chandler

Archaeological inventory in the Seep Ridge Cultural Study Tract, Uintah County, Utah. In: Utah BLM Cultural Resource Series No. 11. Bureau of Land Management, Salt Lake City.

Nickens, Paul R. and Signa L. Larralde

Archaeological inventory in the Red Wash Cultural Study Tract, Uintah County, Utah. In: Sample Inventories of Oil and Gas Fields in Eastern Utah, Utah BLM Cultural Resource Series No. 5. Bureau of Land Management, Salt Lake City.

Rigby, J. Keith

1976 Northern Colorado Plateau. Kendall/Hunt Publishing Company. Dubuque.

APPENDIX A: Site Forms

APD RECEIVED: 10/26/98	API NO. ASSIGNED: 43-047-33234
WELL NAME: HANGING ROCK I 6-2 OPERATOR: ROSEWOOD RESOURCES INC CONTACT: ### Contact	
PROPOSED LOCATION: NWNE 06 - T12S - R23E SURFACE: 0655-FNL-1559-FEL	INSPECT LOCATION BY: / /
BOTTOM: 0655-FNL-1559-FEL UINTAH COUNTY WILDCAT FIELD (001)	TECH REVIEW Initials Date Engineering
	Geology
LEASE TYPE: FED LEASE NUMBER: UTU-57455 SURFACE OWNER: Federal	Surface
PROPOSED FORMATION: MVRD	
RECEIVED AND/OR REVIEWED: Plat Bond: Federal M State[] Fee[]	LOCATION AND SITING: R649-2-3. Unit Henging Rock
(No. <u>mT-0627</u>) N Potash (Y/N)	R649-3-2. General
Oil Shale (Y/N) *190-5(B) Water Permit	R649-3-3. Exception
(No. 49-1547)	Drilling Unit
N RDCC Review (Y/N) (Date:)	Board Cause No: Date:
Fee Surf Agreement (Y/N)	
COMMENTS:	
STIPULATIONS: (1) FEDERAL AP	PROVAC
	·
And the second s	



DIVISION OF OIL, GAS & MINING

OPERATOR: ROSEWOOD RESOURCES INC. (N7510)

FIELD: WILDCAT (001)

SEC. 6, TWP 12S, RNG 23E

COUNTY: UINTAH UNIT: HANGING ROCK

38		31	32	
	T11S R22E T11S R23E		MILE PROPERTY OF THE PROPERTY	
	T12S R22E T12S R23E	⊕ HANGING ROCK I	6-2	-
1		6	5	
				HRU I #5-16 ⊙
		HANGING R	OCK UNIT	
12		7 ⊙ F 7-10	8	

United States Department of the Interior

BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

1998 Plan of Development Hanging Rock Unit

Uintah County, Utah.

Pursuant to email between Lisha Cordova, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management. The following well(s) is/are planned for calendar year 1998 within the Hanging Rock Unit, Uintah County, Utah.

API#

WELL NAME

LOCATION

43-047-33234 HANGING ROCK I 6-2

0655-FNL 1559-FEL 06 12S 23E

DIV OF OIL, GAS & MINING

This office has no objection to permitting the well(s) at this time.

/s/ Michael L. Coulthard

bcc:

File - Hanging Rock Unit
Division of Oil Gas and Mining

Agr. Sec. Chron Fluid Chron

MCoulthard:mc:--

Michael O. Leavitt Governor Ted Stewart **Executive Director** Lowell P. Braxton Division Director

1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)

November 10, 1998

Rosewood Resources, Inc. P.O. Box 1668 Vernal, Utah 84078

Re: Hanging Rock I #6-2 Well, 655' FNL, 1559' FEL, NW NE, Sec. 6, T. 12 S., R. 23 E.,

Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-33234.

Sincerely,

John R. Baza

Associate Director

lwp

Enclosures

cc:

Uintah County Assessor

Bureau of Land Management, Vernal District Office

Operator:		Rosewood Resources, Inc.							
Well Name &	Number: _	Hanging Rock I #6-2							
API Number:	· · · · · · · · · · · · · · · · · · ·	43-047-	33234				•		
Lease:	Federal		Surfac	e Own	er:	Federa	al		
Location:	NW NE		Sec	6	_ T	12 S.	_ R	23 E.	

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well. Contact Carol Daniels at (801)538-5284.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or Robert Krueger at (801) 538-5274.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval which must be obtained prior to drilling.

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department of agend United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OIL, GAS & MINING

CONDITIONS OF APPROVAL APPLICATION FOR PERMIT TO DRILL

Company/Oper	ator: Rosewood Resources, Inc.
Well Name &	Number: Hanging Rock I 6-2
API Number:	43-047-33234
Lease Number:	<u>U-57455</u>
Location: NW	/NE Sec. <u>06</u> T. <u>12 S</u> R. <u>23 E</u>
	NOTIFICATION REQUIREMENTS
Location Construction -	at least forty-eight (48) hours prior to construction of location and access roads.

Location Completion - prior to moving on the drilling rig.

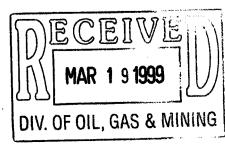
Spud Notice - at least twenty-four (24) hours prior to spudding the well.

Casing String and - at least twenty-four (24) hours prior to running casing and cementing all casing strings.

BOP and Related - at least twenty-four (24) hours prior to initiating pressure tests. Equipment Tests

First Production - within five (5) business days after new well begins, or production resumes after well has been off production for more than ninety (90) days.

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.



CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

A. <u>DRILLING PROGRAM</u>

1. <u>Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered</u>

Report <u>ALL</u> water shows and water-bearing sands to Tim Ingwell of this office **prior to** setting the next casing string or requesting plugging orders. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit to this office any water analyses conducted.

2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a **3M** system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

3. Casing Program and Auxiliary Equipment

If conductor pipe is set it will be cemented to surface. If drive pipe is used it will be pulled prior to cementing surface casing.

As a minimum, the usable water shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the Mahogany Oil Shale identified at ± 902 ft. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

4. <u>Mud Program and Circulating Medium</u>

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

A cement bond log (CBL) will be run from the production casing shoe to \pm 702 ft. and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

6. Notifications of Operations

The Vernal District Office shall be notified, during regular work hours (7:45 a.m.-4:30 p.m., Monday through Friday except holidays), at least 24 hours **prior** to spudding the well.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

7. Other Information

The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted following initial installation and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approval or notification is necessary, please contact one of the following individuals:

Wayne Bankert (801) 789-4170 Petroleum Engineer

Ed Forsman (801) 789-7077 Petroleum Engineer

Jerry Kenczka (801) 789-1190 Petroleum Engineer

BLM FAX Machine (801) 781-4410

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

- Unused fracturing fluids or acids
- Gas plant cooling tower cleaning wastes
- Painting wastes
- Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spend solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom reclaimers
- Used equipment lubrication oils
- Waste compressor oil, filters, and blowdown
- Used hydraulic fluids
- Waste solvents
- Waste in transportation pipeline-related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractory bricks
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation and miscellaneous solids.

CONDITIONS OF APPROVAL FOR THE SURFACE USE PROGRAM OF THE APPLICATION FOR PERMIT TO DRILL

- -Due to the presence of a raptor nest within 1/2 mile from the well site, no construction or drilling will be allowed from April 1 to July 15. If the nest is determined to be unoccupied after May 31 construction of the location could be initiated.
- -The access road should be crowned at between 2 to 3%. When snow is removed from the road during the winter months, the snow should be pushed outside of the burrow ditches and the turn outs should be kept clear so that when the snow melts the water will be channeled away from the road.
- -The reserve pit topsoil will be piled separately from the location topsoil as shown on the cut sheet.
- -The location topsoil pile will be seeded immediately after the soil is piled by broadcasting the seed, then walking the topsoil pile with the dozer to plant the seed. The seed mix provided in the APD will be used instead of the 5 lbs. of fourwing saltbush mention in section 10 (g) of the APD.

All poundages are in Pure Live Seed.

- -Once the reserve pit is dry, it should be filled, recontoured, topsoil spread, and seeded in the same manner discussed above.
- -A pile of subsoil for the construction of tank dikes should be left just north of where the access road enters the location. **Topsoil is not to be used for dike construction.**
- -Runoff water diversions will be installed after the location is complete and the reserve pit closed.

October 4, 2000

CONFIDENTIAL

Rosewood Resources, Inc. P.O. Box 1668

Vernal, Ut 84078

Attention: Leisha Cordova

Subject: APD Extensions

Rosewood Resources, Inc. respectfully requests APD extensions for the following wells:

Federal N #42-22 SE NE Sec. 22, T11S-R24E 43-047-33264

Hanging Rock I #9-11 NE SW Sec. 9, T12S-R23E 43-047-332-19

Hanging Rock I #6-2 Lot 2 (NW NE) Sec. 6, T12S-R23E 43-047-33234

Hanging Rock I #5-16 SE SE Sec. 5, T12S-R23E 43-047-33218

Hanging Rock I #4-14 SE SW Sec.4, T12S-R23E 43-047-33217

If there are any questions please feel free to contact us at (435) 789-0414. Jb

Sincerely,

Iill Henrie

Administrative Assistant

Approved by the Utah Division of Oil, Gas and Mining

G0/)

By:

RECEIVED

OCT 0 6 2000

DIVISION OF OIL, GAS AND MINING

by BLM, but on email to Don Staley dated 8/30/2000.

hold for unspecified problems Margie's comments high lighted.

WELL FILE

Company Name	API	Well Name	Approval Date	Extension Date	Twp	Rng	Sec	County	Lease Type
COASTAL OIL & GAS CORP		On the "Holding for now", these permit problem, so they are just being held fo	s have been	approved, b	ut there	is a	>	NTAH،	INDIAN
DOMINION EXPL & PROD INC		problem, so they are just being held fo	r now. We v	vork hard to b	e confu	sing! \leq		JINTAH	FEDERAL
EOG RESOURCES INC	7					/		UINTAH	FEDERAL
EOG RESOURCES INC	·	Margie						UINTAH	FEDERAL
FALCON CREEK RESOURCES	17						j	DUCHESNE	FEDERAL
INLAND PRODUCTION COMPANY	4301332123	UTE TRIBAL 8-30-4-2 NOT APPROVED YET	25-Nov-98		040S	020W	30	DUCHESNE	INDIAN
IN PRODUCTION COMPANY	4301331951	WELLS DRAW 9-30 EXTENDED TO 6/01	09-Jul-98		080S	160E	30	DUCHESNE	FEDERAL
IN THE NO PRODUCTION COMPANY	4301332114	WEST POINT 5-31-8-16 EXPIRES 12/11/00	09-Sep-98		080S	160E	31	DUCHESNE	FEDERAL
INLAND PRODUCTION COMPANY	4301332115	WEST POINT 6-31-8-16 EXPIRES 12/14/00	09-Sep-98		080S	160E	31	DUCHESNE	FEDERAL
INLAND PRODUCTION COMPANY	4301332116	WEST POINT 7-31-8-16 EXPIRES 12/14/00	09-Sep-98		080S	160E	31	DUCHESNE	FEDERAL
INLAND PRODUCTION COMPANY	4301332119	WEST POINT 9-31-8-16 EXPIRES 11/10/00	09-Sep-98		080S	160E	31	DUCHESNE	FEDERAL
INLAND PRODUCTION COMPANY	4301332120	WEST POINT 11-31-8-16 EXPIRES 11/10/00	09-Sep-98		080S	160E	31	DUCHESNE	FEDERAL
INLAND PRODUCTION COMPANY	4301332032	MONUMENT BUTTE 7N-35-8-16 NOT APPROVED YET	09-Jul-98		080S	160E	35	DUCHESNE	FEDERAL
INLAND PRODUCTION COMPANY	4301332106	SOUTH WELLS DRAW 13-3-9-16 EXPIRES 10/8/00	10-Aug-98		090S	160E	03	DUCHESNE	FEDERAL
LONE MTN PRODUCTION CO	4304733184	A FED H 41-28 EXPIRES 12/3/00	09-Sep-98		100S	240E	28	UINTAH	FEDERAL
LONE MTN PRODUCTION CO	4304733165	FED H 14-30 PRODUCING GAS WELL	19-Aug-98		100S	240E	30	UINTAH	FEDERAL
LONE MTN PRODUCTION CO	4304733183	FED T 31-11 HOLDING FOR NOW	14-Sep-98		120S	240E	11	UINTAH	FEDERAL
LONE MTN PRODUCTION CO	4304733323	FED V 12-21 DRILLING 4/27/99	24-Mar-99		130S	210E	21	UINTAH	FEDERAL
PACIFIC TRANS SUPPLY	4301330435	PTS 32-29 FEDERAL EXPIRED 5/00	20-May-98		080S	170E	29	DUCHESNE	FEDERAL
PETROGLYPH OPERATING CO	4301331930	UTE TRIBAL 30-13 NOT APPROVED YET	01-Jun-98		050S	030W	30	DUCHESNE	INDIAN
MCO OPERATING INC	4304733311	RIVER BEND 13-27 EXPIRES 3/7/01	18-Mar-99		090S	190E	27	UINTAH	FEDERAL
RETAMCO OPERATING INC	4304733312	ROCK HOUSE 11-31 APPROVED 8/25/00	18-Mar-99		100S	230E	31	UINTAH	FEDERAL
RETAMCO OPERATING INC	4304733369	ATCHEE RIDGE 11-27-13-25 EXPIRES 8/31/00	20-Aug-99		130S	250E	27	UINTAH	FEDERAL
ROSEWOOD RESOURCES INC	4304733263	FEDERAL H 34-30 EXPIRES 4/22/01	18-Feb-99		100S	240E	30	UINTAH	FEDERAL
ROSEWOOD RESOURCES INC	4304733242	FEDERAL K 23-22 EXPIRES 4/22/01	10-Dec-98		110S	210E	22	UINTAH	FEDERAL
ROSEWOOD RESOURCES INC	4304733264	FEDERAL N 42-22 HOLDING FOR NOW	15-Dec-98		110S	240E	22	UINTAH	FEDERAL
ROSEWOOD RESOURCES INC	4304733217	HANGING ROCK I 4-14 HOLDING FOR NOW	20-Oct-98		120S	230E	04	UINTAH	FEDERAL
ROSEWOOD RESOURCES INC	4304733218	HANGING ROCK I 5-16 HOLDING FOR NOW	19-Oct-98		120S	230E	05	UINTAH	FEDERAL
ROSEWOOD RESOURCES INC	4304733234	HANGING ROCK I 6-2 HOLDING FOR NOW	10-Nov-98		120S	230E	06	UINTAH	FEDERAL
ROSEWOOD RESOURCES INC	4304733219	HANGING ROCK I 9-11 HOLDING FOR NOW	20-Oct-98		120S	230E	09	UINTAH	FEDERAL
SHENANDOAH ENERGY INC	4304733269	WVFU 18 WG NOT APPROVED YET	06-Jan-99		080S	210E	14	UINTAH	INDIAN

Rosewood Resources, Inc. P.O. Box 1668 Vernal, UT 84078 (435) 789-0414

Rosewood Resources, Inc.

October 13, 2000

Leisha:

Rosewood Resources, Inc. respectfully requests an exception to the General State Spacing Rule. On the two following locations:

Federal "N" 42-22 SE NE Sec. 22, T11S – R24E 43-049-33264

Hanging Rock "I" 6-2 Lot 2 (NW NE) Sec. 6, T12S – R23E 43-049-33234

There are no other mineral owners within 460 feet of proposed locations.

Sincerely,

CONFIDENTIAL

JUVHenrie Administrative Assistant

SENT TO OPERATOR

Approved by the Utah Division of Oil, Gas and Mining Date:

RECEIVED

OCT 16 2000

DIVISION OF OIL, GAS AND MINING



Michael O. Leavitt Governor Lowell P. Braxton Division Director

1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)

November 14, 2001

Jill Henrie Rosewood Resources, Inc. P. O. Box 1668 Vernal, Utah 84078

Re:

APD Rescinded - Hanging Rock I 4-14, Sec. 4, T12S, R23E, API 43-047-33217
APD Rescinded - Hanging Rock I 5-16, Sec. 5, T12S, R23E, API 43-047-33218
APD Rescinded - Hanging Rock I 6-2, Sec. 6, T12S, R23E, API 43-047-33234
APD Rescinded - Hanging Rock I 9-11, Sec. 9, T12S, R23E, API 43-047-33219
APD Rescinded - Federal N 42-22, Sec. 22, T11S, R24E, API 43-047-33264
Uintah County, Utah

Dear Ms. Henrie:

The Applications for Permit to Drill (APD's) for the subject wells were approved by the Division of Oil, Gas and Mining (the Division) in October, November and December, 1998. The Division approved a one-year APD extension for all of the wells on October 11, 2000, extending the APD's to October 11, 2001. No drilling activity at these locations have been reported to the Division. Due to the excessive time delay in commencing drilling operations, approval to drill the wells is hereby rescinded, effective October 11, 2001.

New APD's must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject locations.

If any previously unreported operations have been performed on any of these well locations, it is imperative that you notify the Division immediately.

Sincerely,

Lisha Cordova Eng. Technician

cc: Well File(s)

Bureau of Land Management, Vernal